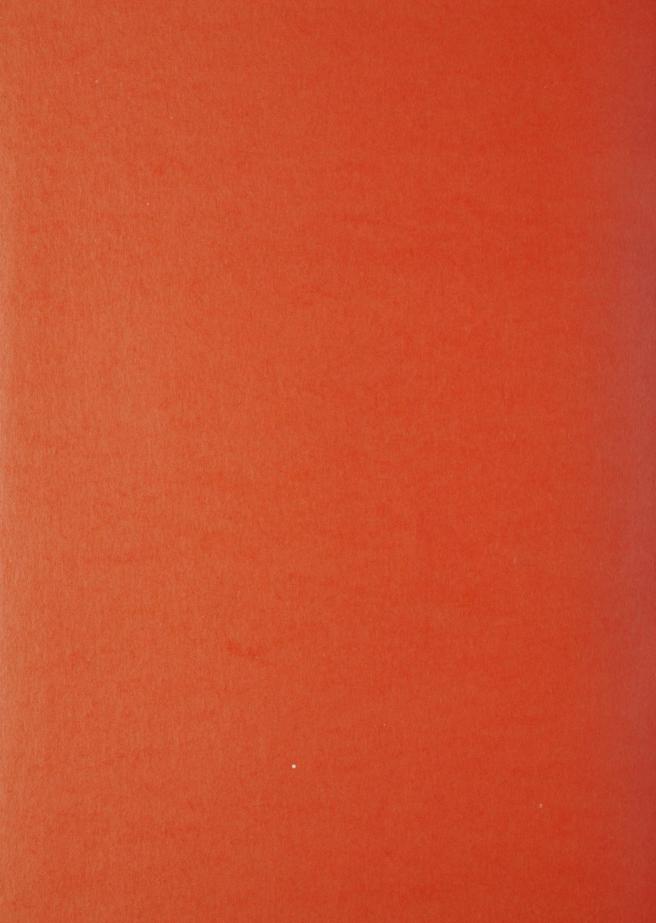
ROTUNDA

Spring 1972 Volume 5, Number 2 A LADY OF THEBES
THE ROM FROM 1912
WOVEN LINKS WITH LATVIA





ROTUNDA

the bulletin of The Royal Ontario Museum Volume 5, Number 2, Spring 1972

Contents

Spotlight with the Editor Past, present and future in the ROM	2
Japanese Paper Handmade in mountain villages David Dudley	4
Links with the Homeland Latvian knitting and weaving in the ROM H. B. Burnham	12
An Old Mortality An Egyptian coffin of the xxnd Dynasty N. B. Millet	18
Look Back The ROM from 1912	28
Fengate and the Fens A pre-Roman village in England Francis Pryor	36
Recent Publications	44
The Growing Collections	45

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The cover: The god Horus of Behtet in the form of a falcon; see story on page 18.

Spotlight with the Editor

Past, present and future at the ROM



Section of marble sarcophagus. Roman, about 250 A.D.

Sedan chair.

HIDDEN TREASURES

A major Jubilee Year exhibition opens to the public May 9 with a members' preview on May 8.

All Art and Archaeology departments have contributed so that the displays will be a rich pageant of fabrics, furniture and artifacts from many cultures and countries. Over 600 objects are included, so many, in fact, that they will spill out of Exhibition Hall into displays in the Armour Court.

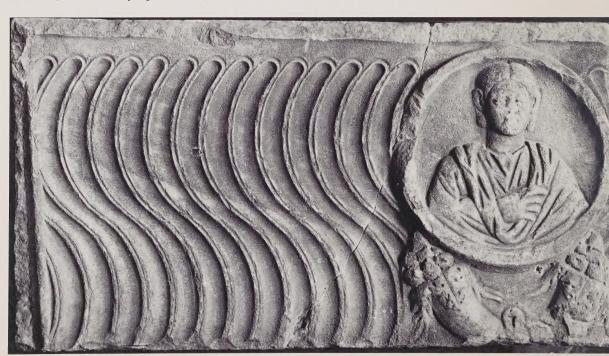
The idea behind Hidden Treasures, as the name implies, is to show those objects which normally cannot be displayed due to lack of gallery space.

AWARD FOR ROM BOOK

A book published by the Royal Ontario Museum has been selected by the Book Promotion and Editorial Club as one of the best designed and best produced Canadian books published in 1971. The Book, Chinese Jades, is available from the Museum and was reviewed in the last issue of ROTUNDA. The price is \$8.95, postage paid.

ROYAL VISITOR

In town for a meeting of the World Wildlife Fund, of which he is President, Prince Bern-



hard of The Netherlands spent an afternoon at the Museum recently.

Greeted at the entrance by Director Peter Swann, and a surprising crowd of spectators which simply materialized, the Prince visited the Department of Mammalogy. There Curator R. L. Peterson and his staff described the research work of the Department.

Also in the Prince's party were noted British ornithologist Peter Scott and Guy Montford, who understandably spent most of their time with J. C. Barlow, ROM's Curator of Ornithology and G. B. Wiggins, Curator of Entomology. Dr. Lukas Hoffman from Switzerland, Executive Vice-President of the World Wildlife Fund, visited the Ichthyology Department where his guide was W. B. Scott, Curator-in-Charge.

Later the various groups joined each other in the Members Lounge for coffee.

ASSOCIATE DIRECTOR APPOINTED

Dr. Walter Tovell has been appointed Associate Director of the Museum. In this capacity he will work with the Director, particularly in connection with curatorial activities.

Dr. Tovell, a geologist who received his doctorate from the University of Toronto, first joined the Museum in 1946. Three years later he was appointed Curator of the Department of Geology. He has held that post ever since

and will continue to do so until a successor is named.

He holds Associate Professorships in the University of Toronto's Department of Geology and College of Education.

TWO FROM ROM HONOURED

The Canadian National Sportsmen's Show has honoured two Museum staff members. They are Dr. W. B. Scott, Curator-in-Charge of Ichthyology and Herpetology, and Terry Shortt, Chief of Display Biology. They each received a stainless steel Canada Goose mounted on marble.

Neither award was for a specific single accomplishment but for many. As the CNSS phrased it, "because of their many years of dedicated service to the show and the conservation work which it supports."

TOO MANY ZEROS

In the previous issue of ROTUNDA (page 26, *The Rise and Fall of Fossil Dynasties*, by M. A. Fritz) we inadvertently reversed the flow of time and doubled the span of the age of dinosaurs. Ammonites flourished in the seas, not 200-500 million years ago, but 200-50 million years ago. Our apologies to you and to the author, and a pox on pesky zeros.



H. R. H. Prince Bernhard with Director Peter C. Swann and Curator of Mammalogy, R. L. Peterson

Chōchin, modern hand-made lantern of paper and bamboo

Sensū, folding fan used by Nōh play actors, constructed of paper and bamboo, decorated with goldleaf and paint. Made in Kyoto, 1967

Fragment of Japanese woodblock print on paper, depicting Fūdo. Kamakura period. Extracted from one of the sculptures of Toji Temple, Kyoto







JAPANESE PAPER Handmade in mountain villages

by David Dudley, Conservation Department "I have a Japanese painting on rice paper."

"Are Oriental paintings always done on rice paper?"

"Is this rice paper?"

To such frequent questions I must usually reply, "No, it's Japanese paper," for "rice paper" is a common misnomer for fine handmade Japanese paper.

The "rice paper" which the Chinese used for painting in the 19th century was cut from the pith of the *Iatsia papyritera* tree, and is not a paper at all. It becomes very brittle and tends to disintegrate with age. Japanese paper, on the other hand, is extremely durable and in its country of origin has important household, artistic and commercial uses.

The art of paper-making is said to have been invented in China in 105 A.D., during the reign of Emperor Ho, by Ts'ai Lung. It is more probable that Ts'ai Lung, a court official, was

brought the perfected process and in turn introduced it to the Emperor's attention. The material used seems to have been mainly bark or hemp fibre.

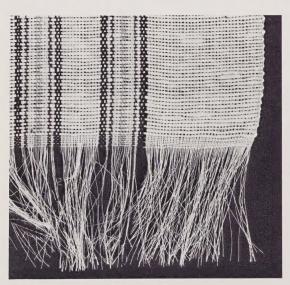
Paper-making moved eastwards to Japan through Korea in 610 A.D., and westwards to Europe by way of Turkestan, Persia, Arabia and Egypt from about the 12th century onward. The paper introduced in Japan by a priest/craftsman named Donchô of Korea was too brittle to be of any use. Prince Shotoku, prince regent of Empress Suiko, improved upon Donchô's method by using the bark of kozo trees which belong to the same family as the mulberry. At the same time he encouraged the people in various provinces surrounding Nara to cultivate kozo trees, and laid the basis of the Japanese paper-making industry. Before long, the method of boiling the fibres with lye of wood ash, and the addition of certain glutinous vegetable substances was found.

During the Tempyo era of the late Nara period, 710-793 A.D., Chinese classical learning, law, mathematics, medicine and other studies were introduced into Japan, largely due to the

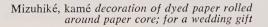
influence of Buddhism which reached the Islands in 552 A.D. and flourished under the protection of the imperial court. Arts, industry and architecture developed very highly. Paper-making, too, flourished, and gradually made its way from Kyoto, the political centre, to the neighbouring provinces of Miumasaka, Echizen, Izumo and Mino.

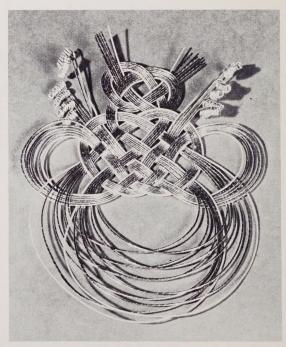
The quality of the paper produced during the Nara period is attested by the fact that the *Dharani*, Buddhist charms to be placed in pagodas for the sake of peace in 770 A.D., was to be regarded as the oldest printed matter in the world. The *Dharani* utilized white sheets made mainly from hemp. Fibres of *kozo* and *gampi* (a kind of shrub) and other materials were also used. Some papers were dyed with vegetable dyes in dazzling red, indigo, greens and yellows; a dozen other different papers, beautifully patterned, appeared, some of which are now among the Shôsôin Imperial Treasures in the city of Nara.

Early in the Heian period (794-1191 A.D.) Emperor Heijo summoned to Kyoto expert paper-makers from various provinces and estab-



Detail of woven mat with hemp-and-wool warp and paper weft





lished a paper-mill along the Kanya river. The mill supplied annually 20,000 sheets of paper, 60 x 36 centimeters, for the use of the court and government offices. Because it was under imperial control, the mill employed the most highly skilled makers and the best materials. Rivalry between the paper-makers sharpened their skills and begot constant improvements in their methods. The very beautiful Kanya paper, still in small production today, was one of the results.

In the Kamakura period (1192-1332) both the demand for paper and the art of paper-making made enormous strides. Papers produced in the capital were rivalled by high class papers from the provinces. In 1598, a priest named Bunzayemon made paper from gampi grown wild in the mountains near Shuzenji temple in the province of Sagami. This paper was characterized by a slight red colour and straight marks laid two inches apart, horizon-tally. Goka, a village in the province of Echizen, is famous for the production of Hosho, a paper which dates from very early in Japanese paper-making history. Hosho and other papers flour-

ished during the Muromachi period, 1333-1567.

From 1200 to 1600 the rulers of Japan like Oda Toyotomi and Tokugawa gave assistance and encouragement to the paper-making industry and made every effort toward its development. During the Yedo period (1603-1867), each lord encouraged paper-making in his own province. In those days, rice paper and lacquer constituted the chief articles of tribute to the feudal lords. The main papers were Torinoko (which contained white clay) from the mill in Settsu, Nishi-no-uchi, and Hodo-mura from the mills in Hitachi and of Shimozuke. Most popular, however, was Hanshi, a paper manufactured in nearly every province, and widely used for almost everything—prints, painting, lanterns, umbrellas, and shoji—latticed sliding doors and windows.

Today, as in the past, hand-made paper is often an off-season source of income for small-scale farmers living in mountain villages where there is an abundance of good clear stream water. Paper-making usually begins late in November and ends in the following April.



19th century Chinese painting on "rice paper" (Iatsia papyritera) Winter brings a useful lull in farming activities, and the extreme cold in the mountains reduces the amount of bacteria in the stream water. The work is carried out in the home, and the methods have been passed through succeeding generations of each family with little change.

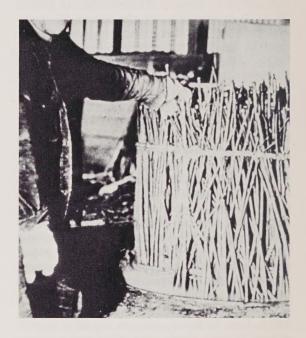
The raw materials are vegetable fibres from gampi or from the inner bark (cambium) of kozo and mitsumata, both of the mulberry family. The term kozo is loosely applied to such trees. In a period of four to five years, the kozo bears about eight shoots a year. After this period there are fewer shoots, and the tree must be replaced with a new young plant. The shoots are cut every second year, when their growth is most suitable for paper-making. The shoots are harvested in the autumn, stripped of their leaves, cut into lengths of about 14 inches, and bound together in small bundles.

The bundles of shoots are placed upright in a cauldron, and forced tightly in by pounding with a wooden hammer. They are steamed for about four hours, until the outer bark softens enough to be peeled off. The bark so obtained is hung over long poles, and dried in the sun, then bundled and stored until the day chosen to start paper-making.

Now blackish in colour, very hard and dry, the bark must be soaked in a tank of running water for at least ten days. The long soaking removes any glutinous substances which may remain. The bark is then picked over, its second coat scraped off with a knife, and dried in the sun for a further three or four days.

The bark is whitened by soaking in water for half a day, and then boiling for about four hours. Lye obtained from wood ash is added and the boiling continues until the bark is soft enough to be easily crushed between the fingers. The fire is then extinguished, the cauldron tightly covered, and the contents left to steam for several hours. By this time the water will have become dark brown, a proof that chemical constituents of the bark, such as starch, fat and tannin, are in a state of solution. Within the past 50 years, soda or caustic soda have been used instead of lye. This alkaline matter is easier to remove after the boiling, but tends to weaken the *kozo* fibres.

Preparing kozo shoots for steaming



Steamed bark being beaten to crush the fibres

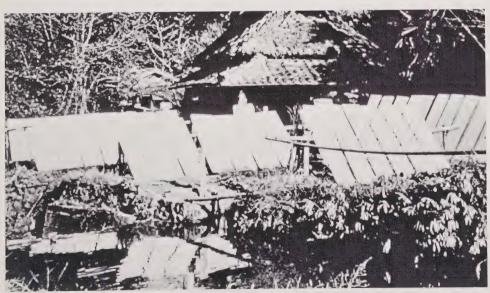




A sheet of paper being formed from paper stock in a mould

Sorting the finished sheets of paper





Sheets of paper on wooden drying boards, exposed to the sun

The bark is then put in bamboo baskets and immersed in running water to remove the lye. It is then stream-bleached—packed evenly in baskets or cloth bags and put into a fast-running stream, usually on long poles stretched from bank to bank. Once bleached, the *kozo* is floated on running water while the women of the family pick out by hand all the coarse bark, hard fibres and other impurities. Impurities which cannot be picked up with the fingers are removed with the aid of pins.

Next, the bark is made into balls the size of a melon, which the women lay one by one on a hard wooden board or flat stone and beat with rods of oak or persimmon to crush all the fibres. A small quantity of water is poured over the mass from time to time during the beating. When the fibres are crushed well enough, they have the look of wet cotton and will float separately on water.

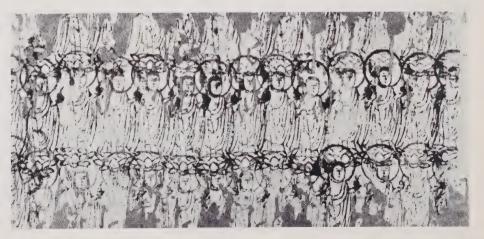
Paper stock is made of fresh hand-beaten *kozo*, mixed in a rectangular vat of water to which is added a vegetable substance known as *tororo*, an extract from the roots of first-year yam plants. The role of this vegetable glue is to make the fibres float uniformly on the water. If the fibres gather together it is impossible to obtain paper of unvarying thickness. *Tororo* also slows the speed of drainage, so that a better formed sheet of paper will result.

The mixture in the vat is stirred by an agitator until the solution is of even thickness and a dull white colour.

When the mixture is satisfactory, the pulp and water are scooped up on to a mould, framing a fine textured screen of small finely split bamboo tied together with silk thread. The mixture is allowed to run back and forth over the face of the mould, lengthwise and breadthwise, over and over again. As the water filters through the screen at the bottom of the mould, the fibres become entangled and form a thin film that adheres to the surface of the screen. When the desired thickness has been attained, the surplus stock is cast back into the agitator vat. The sheets of wet paper are removed from the screen, piled one on top of another and left overnight with a heavy stone on top to squeeze out the excess water. The wet sheets are then taken one by one from the pile and brushed lightly onto a wooden drying board. The boards are placed in the sun, and the dry sheets of paper are later removed, sorted, trimmed and packed.

In this modern age, the Japanese like the "western world" tend to produce more synthetic material, even in paper. As the younger members of the small paper-making establishments go off to the cities and factories, the small paper-producing families are slowly dying out. Needless to say, really fine Japanese paper, made exclusively by the old and simple outdoor method, is becoming more and more scarce and expensive. It still cannot be equalled in quality and beauty. And it is not "rice paper."

Fragment
of Japanese
woodblock print
on paper,
depicting Jiso.
Kamakura period



Zabutón (cushion) of paper, with modern hand-printed woodblock design in indigo



David Dudley was born in London, and joined the British Museum in 1954. In 1966-68 he was awarded the Leverhulme Research Fellowship, to study conservation of Oriental painting at the OkaBokkodo Studio, Kyoto, Japan, and in 1970 he was appointed Fellow of the International Institute of Conservation of Historic and Artistic Works. He is presently Paper Conservator in the ROM Conservation Department. Mr. Dudley has been a visiting lecturer at the Institut Royal du Patrimoine Artistique, Brussels, Centraal Laboratorium in Amsterdam, U.S.S.R. State Restoration Laboratory, Moscow, and the Laboratory of Research and Conservation, Krakow, Poland.







Indigenous ways of life are steadily vanishing in the tide of western industrialization. Man's history, customs and relations with others may all be committed to the printed page and stored in libraries, but it is his arts and crafts that give tangible substance to the written word. It is a museum's urgent duty to preserve the traditional objects and artifacts man has made and used. Both his highest artistic achievements and the simple objects of everyday life have beauties of their own, and all are necessary to give a true picture.

Both accidentally and deliberately, representative collections of the material culture of various nationalities and traditions have been built up in the Textile Department of the Royal Ontario Museum over the years. Some materials were sent home by early missionaries to encourage interest in their work. Others resulted from determined efforts to build collections. Some of the early collections are small but unique: others are outstanding.

The costumes from the Near East, particularly Palestine (never exhibited) were collected by W. Holman Hunt, the pre-Raphaelite artist, shortly after 1850. The aboriginal material from Formosa (never fully exhibited) was gathered by the Rev. George McKay in the late 19th and early 20th centuries. The Philippine collection (never exhibited) was cornered by Professor Ramsay Wright after it had been shown at the St. Louis Exhibition of 1906. The remarkable wealth of Roumanian costumes and textiles, supplemented by material from Transylvania and Hungary (exhibited 1959), was collected by the late Amice Calverley during the 1930s and donated by her to the Museum. The Japanese country cloths (exhibited 1965), were gathered and given by Mrs. Edgar J. Stone who is also the donor of our Spanish collection (exhibited 1970).

Latvian national costume.
Intricately woven bands form the tasselled belts



The latest addition to these and other specialized fields is the Latvian collection recently displayed in the Textile Gallery. A Hundred Mittens: Latvian Knitting and Weaving showed what could be done by a national community to assure the preservation of the cultural traditions of a country. It is most suitable that such a record should find a safe and permanent home in the Royal Ontario Museum. The Museum is a meeting place for the many cultural backgrounds that have contributed to the building of Canada, and it is right that their traditions should be safely preserved here for future generations.

The first display of Latvian material in the Museum was a special exhibition, in the Upper Rotunda in 1968, organized to mark the fiftieth anniversary of the Independence of Latvia on November 18, 1918. A wide range of items was lent by members of the Latvian community, and a choice of two was offered to the Textile Department in appreciation of their help. The pieces selected were presented by the Latvian Federation in Canada, and they were the seed from which the collection grew.

In 1971 Mrs. Nora Priverts, the Secretary of the Textile Department, and herself Latvian, was looking forward to her retirement in June. She decided that an effort should be launched to make the Latvian collection in the Museum, which would show the knitting and weaving traditions of the country, as representative as possible. She knew a number of the older members of the community had brought things with them to Canada, and she felt the urgent need that these be preserved for the future before they were entirely worn out or lost. She approached one person after another, and one by one they parted with the various things that they had taken with them when they fled their country. The tide of generosity grew, and by early summer it was realized that sufficient had been donated to justify a special display in November and December, 1971, giving another occasion to mark the anniversary of Latvian Independence.

The range of materials that came to light as the project got under way proved surprising, and most of it was accompanied by exact docu-

Linens, blankets, shawls and patterned belt. Unmarried girl's headdress at left of belt



mentation. It was even more representative than had been hoped considering the conditions under which it had been saved. Latvia, like neighbouring Estonia and Lithuania, had achieved independence following the Great War of 1914-18, after centuries of foreign domination. With the collapse of German strength towards the end of the last war, they became a target for Soviet occupation. As the Russian forces advanced people fled and headed for the Baltic coast in an endeavour to reach Sweden. Their flight was usually on short notice, sometimes with only an hour's warning of the approach of the Russian units.

People grabbed what they could for warmth and protection against the weather, and this explains the wide variety of patterned blankets and great shawls that now form part of the Museum's collection. The beautiful patterned mittens served the same purpose. Linens, particularly towels and table cloths with characteristic simple and complex patterns, were an important part of the cultural traditions of Latvia, and it was feared that few would exist in Canada. It was a pleasant surprise when more and more appeared, and on enquiry their survival was explained. Anyone fleeing with

Latvian knitting and weaving—mittens, gloves and blankets



a small baby reached first for a supply of linen: much was cut up and used, but a widely representative selection survived as a record of the varied traditional techniques. Among the blankets, shawls, and linens that have been given to the Museum, no two have proved to be alike.

When last autumn's special exhibition was being planned, it was realized that national costume was essential for a proper display. Members of the Latvian community were asked to lend examples for the occasion. The response was heartwarming: a representative selection appeared. Two were generously given to the Museum immediately, and a third was donated during the reception held for donors in the Textile Gallery. These are a valuable repre-

sentation of this important aspect of the long traditions of the country. Bands and belts using various techniques and patterned with traditional motifs are an integral part of national costume, and the selection that has been given adds to this aspect of the collection.

Patterned mittens hold a special place in the folklore and customs of Latvia, and numerous references to them are found in the songs of the country. Most of the patterns are multicoloured, with as many as five shades used occasionally. A limited number are of the stylized floral type, but most are based on traditional motifs, probably animist in origin, whose beginnings are lost in the mists of time. The eight-pointed star, the sun and the sun chariot, the fire-cross,

all find their place in a multitude of variations. The collection of mittens now in the Museum shows a splendid range of patterns. Like the other examples of traditional culture, many of these are the gifts of a host of individuals who have so generously parted with their links with the remembered homeland. Regretfully, they cannot all be enumerated here, but one collection warrants special mention.

The late Irma Leşina was one of Latvia's specialists in the field of folklore, and she made knitting patterns and techniques her special interest. She carried her notes and her collection of mittens with her when she fled, and was working towards a publication at the time of her death. Her husband published Latviešu cimduraksti (Latvian Mitten Patterns) in her memory, and it illustrates the many and varied patterns she had recorded, usually with full documentation. He donated to the Museum not only her large collection, but also the unpublished notes and records she had prepared. It was this generous gift that suggested the title of the special exhibition.

The gathering of a collection is only the beginning as far as the Museum is concerned. Once it is assembled, work begins in order to discover the exact techniques involved and the processes followed. In this way the character-

istics of a national tradition, and its connections with related cultures, are both established. This research is a major function of a curatorial staff, and the Textile Department of the Royal Ontario Museum already has completed several such projects. A major interest is the wide range of national cultures that have come together in building Canada. The older pioneer traditions dating back to the early settlements in the country have already been studied in depth, and will be published shortly. Others that are more recent are being pursued as the special collections are gathered. In due course, the results should also be available to a wide public.

The Estonians are already gathering a collection for the Museum to ensure the preservation of a record of their cultural traditions. It is hoped that other communities in Canada will be inspired to do the same. Textiles, often the only tangible connection with the past, have been used to provide a familiar surrounding in a new land. They are naturally perishable, and their life is limited. It is hoped that before they vanish through use, some may be preserved for posterity. The Royal Ontario Museum welcomes the opportunity to be a cultural centre for all Canadians, and to preserve the record of the many varied traditions that are blending to form a unique cultural identity.



Harold B. Burnham, Curator of the Textile Department of the ROM, was born in Edmonton, and after a number of years of business experience, joined the Museum in 1958. He is a past president of the Canadian Guild of Crafts (Ontario) and of the National Committee of the Guild, a member of Conseil de Direction, Centre International d'Etude des Textiles Anciens, and an Associate of the International Institute for Conservation. His main field of interest is textile technology and history from all periods.

He has been very active in the preparation of the international textile vocabularies being prepared by CIETA, and has written on the world's earliest textiles from Çatal Hüyük in Anatolia, Chinese velvets, silks of the Han dynasty, and the traditions of handweaving in Canada.

AN OLD MORTALITY

by N. B. Millet, Curator, Egyptian Department

Although Egyptian mummies and their containers are highly popular exhibits in any museum, they remain, among all the wealth of material from ancient Egypt, the least known and least studied by Egyptologists themselves. This is in a way understandable. Egyptologists as a class tend to deplore that image of Egypt as a land of tombs which so attracts the public, and would like to emphasize other more important (and more cheerful) sides of the Egyptian and his culture. Almost nothing has been written on mummy-cases and their decoration, and many Egyptologists would be in fact unable to date a particular coffin more closely than by a few hundred years. Still, as historical and religious documents, such things have a very real value, and their colourful and (to the public) exciting appearance lends itself rather well to exhibition and educational purposes. As an example of what can be learned from a mummy-case in the way of information about, or illustration of, Egyptian culture, we can examine one particularly fine example in the ком, that of a Theban lady of the Twenty-second Dynasty, about the middle of the ninth century B.C.

The cartonnage coffin numbered 910.10, and thought to have been obtained by C. T. Currelly in Egypt, belonged to a lady named Djema'etes'ankh, whose name means "the goddess Ma'et has said that she will live." Personal names at this late period in Egyptian history are often revealing, and sometimes pathetically so. In this particular case, it would seem that before our lady was born her parents sought the assurance of a deity, the goddess of truth and justice, that their baby would survive. This would have been done in the case of some gods by means of a regular oracle, but we know of no oracle of Ma'et. No doubt Djema'etes'ankh's parents had recourse to a simpler means of household divination, or to a dream. Our lady's mother is also named in the inscriptions of



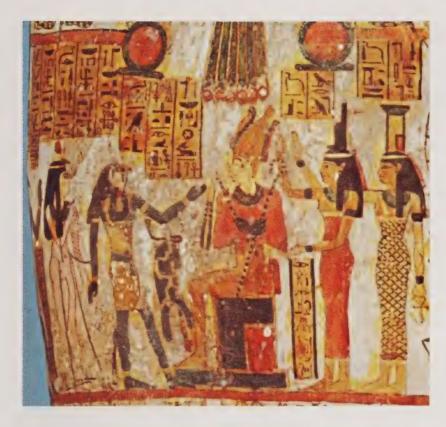
the coffin; she was called Shedtaōpe, which means "the goddess Taōpe has saved her." Taōpe was the hippopotamus goddess who presided over childbirth and drove away evil influences from new-born children, and it would seem that Djemacetescankh's mother had herself barely escaped the fate of the many infant children who must have died at birth in those days.

Both Djemacetescankh and her mother are given the titles of "the lady of the house and musician of Amūn." The god of Thebes, Amūn or Amūn-rē king of the gods, was the greatest of the gods of Egypt at the time. He dwelt in the enormous temple complex of Karnak, at Luxor in Upper Egypt (known to the Greeks as Thebes) and controlled through his vast priesthood a substantial fraction of the land and wealth of the country. There can be very little doubt that Djemacetescankh was herself a Theban by birth and residence, and that she was buried somewhere in the sprawling complex of cemeteries and funerary temples which lies on the west bank of the Nile, across the river from the temple where she served. Her husband's name is also given; he was a "doorkeeper of the house of Amūn" called Pa-cankhntof. Since it is not usual for a husband's name to be added to a woman's coffin, we are no doubt justified as seeing Pa-cankh-ntof as having survived his wife and having paid the expenses of her burial.

The fact that both "musician of Amūn-rē king of the gods" and "door-keeper of the house of Amūn" are priestly titles of a sort should not betray us into thinking that we are dealing with a purely priestly family. After all, the "musician" was only a member of the temple choir, and although we do not really know what a temple door-keeper actually did (if he did anything), it is clear that he was very low in the scale of temple attendants. He probably simply served on festival occasions with a group of colleagues who guarded the temple gates



The cartonnage of Djemacetescankh. The face is gilded, as are some of the details of the painted representations



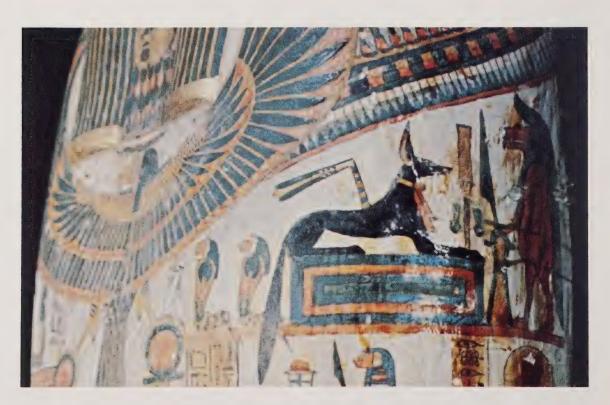
A picture of the deceased, in the fashionable lady's costume of the time, is prominent in this vignette of the judgment of the soul. The great scales are attended by two gods, while another, the ibis-headed Thoth, god of writing and registrar of the gods, leads Djemacetescankh into the presence of Osiris

against unauthorized persons and collected entrance-fees. Djemacetes ankh herself probably was entitled to a small fee for playing music for the choir on such occasions. Both these positions were no doubt mildly lucrative and had to be purchased from the priestly authorities for a fee. Such buying and selling of offices, important and otherwise, was a part of social and economic life in Egypt at the time. Even rather lowly positions such as these enjoyed by this couple would have carried much social prestige and a certain desirable feeling of being one of the god's household, and thus under his protection in this world and the next. Most of the priests and priestesses whose mummies and coffins crowd modern museums were not full-time servants of their gods, but simply prosperous middle-class citizens who held priestly offices as additional sources of income and prestige, while their real careers and livelihood lay elsewhere. Many of the men who proudly styled themselves priests of this or that god at this period were very likely officers in the army that, in fact, controlled the country and far outweighed the priesthood in political power.

We are fortunate in having on our cartonnage a depiction of Djemacetescankh herself as she would have looked in life. In the first register she is shown in festival attire being led into the presence of the great god of the afterlife, Osiris, "Foremost of the dwellers in the West." The picture is certainly not intended as a portrait, but rather as a generalized depiction of a lady of her station in life. She wears a long, pleated robe, made of a simple rectangular piece of very thin pinkish linen with a blue hem, draped and knotted rather than tailored. and a wide collar painted green. Her wig, a heavy affair hanging to well below the shoulders, has the rounded bottom contours characteristic of the fashions of the Twenty-second Dynasty. This imposing headdress is made more impressive still by a white fillet and a large blob of scented fat placed on top, an element of the festival dress of the day. Its purpose was to melt and run down over the head and body of the wearer to cool her off and provide a pleasant smell to counteract the rather strong odour of the barley-beer served at the festivities.

The cartonnage has never been opened, but it and the mummy within have been X-rayed, and we are able to say something about Djemacetescankh herself. The body appears to be that of a small woman, just slightly over five feet tall, and probably fairly young, somewhere between twenty-five and forty. On the X-ray plates it can be seen that she was embalmed in accordance with the accepted practices of the period, with packing materials introduced under the skin of the neck, shoulders, and rib-cage, to fill out the contours to an ap-

proximation of life. This strange practice seems to have begun in Twenty-first Dynasty times, some two hundred years before our lady lived. At that time extensive tomb-robbery had begun in the Theban necropolis, and the tombs of the kings themselves, hidden in their secret valley, had not been immune. The pious officials and priests of Thebes did what they could to restore the damage, and had the royal mummies rewrapped and buried in secret a second time. Once, however, these upper-class Egyptians had seen with their own eyes the changes brought about by mummification, they may have pressed for the development of techniques which would make the finished mummy look more like the living body. Thus the embalmers of Djemacetescankh's time packed the body's cavities with mud, linen, sawdust, and other materials, and introduced packing under the skin of arms and legs at a point in the process



Protective deities on the shoulder of the cartonnage

when the skin was still soft. The X-ray shows also that artificial eyes have been inserted, of what material we do not know. Four masses inside the chest are certainly the packets containing the embalmed entrails, removed at an early stage in the process, and returned before the bandaging was to begin. These operations were performed through an opening in the left side, at about the waist. One of the Greek historians tells us that the technician who had to make this cut was ritually driven off by his colleagues, with stones and curses, since it was theoretically a wicked act to mutilate a human body, even when it was necessary for its preservation. A four-sided plate, of metal or beeswax, visible in the X-ray plate, covers the incision, and is probably marked with the symbolic "eye of Horus," to compensate magically for the unavoidable wound. Over the chest of the body lie two of the amulets which ancient custom prescribed, a vulture with outspread wings, perhaps of sheet gold, and a large scarab, traditionally of dark green stone such as green jasper. These amulets are enclosed within the numerous layers of sheeting and bandages which compose the mummy wrappings.

Once the embalming and wrapping were completed, to the accompaniment of the recitation of protective spells by an attendant priest, the mummy was transferred to the previously prepared cartonnage. In earlier times a closely shaped wooden coffin served as the immediate protection of the body, set inside one or more larger coffins, nested like a set of Chinese boxes. By Dynasty XXII times the rising cost of cedar wood, no longer easily obtainable from the Lebanese hills, had resulted in the substitution of the cartonnage, essentially a one-piece shell of stiffened canvas. Many layers of cloth, saturated in a thin adhesive solution, were

Radiograph of the head of the mummy. The outline of the mask of the case itself is visible. The artificial eyes are just discernible, as is the packing around the throat

Radiograph of the thorax. The vague whitish masses within the rib cage are the parcels containing the embalmed entrails





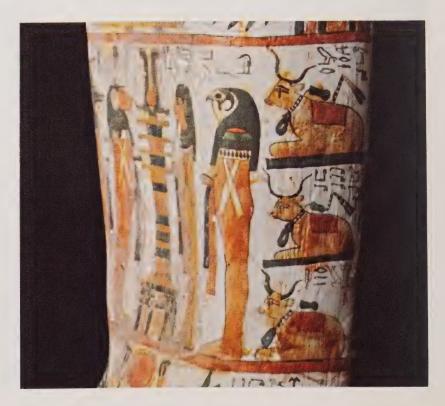
moulded on a mummy-shaped wooden form. When dry, the resulting carapace could be cut up the back, spread, and removed. Once the body was inserted, the cartonnage was laced tightly up the back like an old-fashioned corset and a wooden plank fitted in to close the footend. The cartonnage was then plastered to make it ready for the all-important decoration.

The painter who carried out the decoration of Djemacetescankh's cartonnage was probably one of a fairly large group of craftsmen attached to the temple of Amūn at Karnak, and available to private persons for a fee. He was, as his work shows, more of a competent and well-trained illustrator than a gifted or creative artist. There can be little doubt that, when commissioned to decorate a set-piece such as a coffin, he would have worked from some sort of model, but it is likely, I think, to have taken the form of a list of written descriptions of suitable scenes, vignettes, and elements, rather than of a pictorial pattern book. From such a list he or his

patron, Djemacetescankh's husband, would have made a selection. The general arrangement and choice of subjects was, of course, largely determined by tradition and the fashions of the moment. One overriding consideration was the fact that the scenes should be arranged so as to be properly seen when the cartonnage was in a standing position, for a mummy made its last public appearance standing before the tombentrance during the final rites, and during the funerary banquet. This was an affair like an old-fashioned European wake, when the relatives and guests celebrated the unhappy event with food and drink consumed in a festal atmosphere.

Some elements, indeed, of the decoration of our cartonnage reflect directly the party atmosphere which surrounded the funeral ceremonies. Djemacetescankh is shown wearing on her head and around her shoulders elaborate floral decorations of a kind handed out at Egyptian parties as favours, and occasionally

The sacred cows and the bull who symbolize eternal nourishment for the dead in the afterlife. (Opposite) the sacred boat of Sokar, the ancient hawk-god of the Memphite cemetery, appears in the third register. (Opposite, above) The winged scarab of the sun protects the feet of the mummy. In some mummies of the period an amulet in this shape is found included in the wrappings of the feet

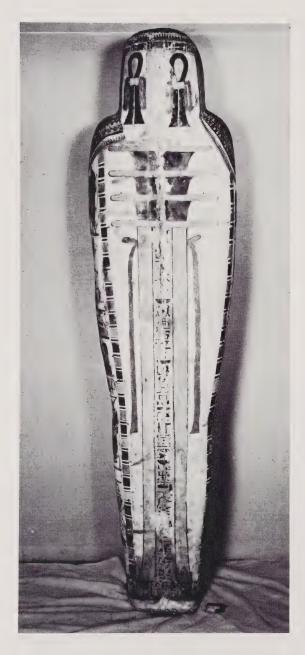




found preserved in tombs. These are head-wreaths, garlands, and wide collars made of flower petals and leaves strung together or sewn on papyrus-paper foundations, worn during the celebration and discarded afterwards.

For the rest of his decoration the painter chose symbols and episodes from the two Egyptian myth-cycles which meant the most in the funerary cult, those of the sun-god Rec and of Osiris, king of the dead. Thus the ramheaded hawk whose outspread wings cover and protect the dead woman's chest, the scarabs at the foot and on the crown of the head, and the naked child under the left shoulder, are all forms of the sun-god, who according to the most ancient notions ruled the underworld at night as he did the upper world in day, and in whose heavenly boat the early kings of Egypt had believed they would travel forever after death. For centuries, however, the old solar funerary myth was eclipsed by the more democratic and more human faith of Osiris, the kingly god who,





View of the back of the cartonnage showing a painted representation of the Djed-column, an old Osiris cultobject which also symbolizes eternal stability. The heavy stitching which served to close the cartonnage up the back has been covered with a strip of linen pasted on, which was then used as the ground for a vertical line of hieroglyphyics containing a funerary prayer for the dead woman

after his treacherous murder on earth, had passed on to be ruler of the world of the after life, and who received into his pleasant paradise all those who had lived without offending god or man. By the fifteenth century B.C., however, the old solar concepts began to come into fashion again, and by Djemacetescankh's time were an accepted part of funerary belief. Thus the Egyptian of 850 B.C. had not one religion of the dead but two, and apparently had no difficulty in accepting both as accurate pictures of the life after death.

The subject-matter of the Osiris myth dominates the decoration of our cartonnage, and three aspects of Osiris himself are commemorated in the central part of the first, second and last of the four registers into which the painter divided his field. At the top is the scene which represents the final triumphant denouement of the deceased's journey to the western abode of the immortal dead. Here Osiris "foremost of the dwellers in the West," seated among his attendant gods and goddesses, receives Djemacetes ankh as she emerges victorious from the assessment of her character by means the great balance, in which her heart is weighed against a feather symbolizing righteousness and proper behaviour. In the second register stands the plumed symbol of Osiris in his form of "the Lord of Abydos," his chief and most ancient cult-town in Upper Egypt. At the bottom, flanked by the four "sons of Horus," is another pillar-shaped cult-object associated with Osiris as "Lord" of his original home, the town of Busiris in the Delta.

The third register makes note of still another funerary cult, one particularly characteristic of the Twenty-second Dynasty. This is that of the hawk god Sokar of the ancient Memphite cemetery area, across the river from where Cairo now stands. The worship of this ancient and puzzling deity was instituted in the Karnak complex at Thebes during this period, and his characteristic archaic boat on its sled-like stand appears on many coffins of the period.

Other figures crowd the areas around the main depictions of the Osiris cult and its symbols. Quite striking are the seven cows and their attendant bull, most of them arranged on

the two sides of the leg section. These, each labelled with its ancient name, pregnant with magic, were apparently originally intended to supply milk and meat for the dead king in the early days when an active afterlife was the exclusive privilege of royalty. Now, after two thousand years of the gradual democratization of funerary beliefs, they are thought to be available to all of the glorious dead.

Other figures on the cartonnage serve purely protective functions, such as the vulture goddess of the third register, or the knife-wielding and fearsome hippoptamus goddesses on the shoulders. These last are perhaps present because they were believed to be particularly active in the protection of women and small children. They are, in fact, minor relatives of the goddess Taōpe mentioned earlier.

Thus, armed with amulets, painted about with the legendry of two mortuary faiths, and protected by benign winged goddesses and fear-some female demons, Djemacetescankh went to her tomb. Precisely where it lay we cannot now tell, but a location on the West Bank at Thebes is certain. It was almost certainly not an elaborate affair, and may have been merely a hasty pit or a corner of an older tomb being reused at the time. The fashion of gorgeous decorated tomb-chapels and carefully-excavated chambers in the rock was long dead. The Egyptians of Djemacetescankh's day and social class preferred to concentrate their funerary expenses on the

preparation of the mummy and the decoration of its containers, destined to be hidden forever from human gaze, rather than on a pretentious tomb that would unmistakably indicate the position of the burial to the innumerable tombthieves who infested the necropolis of Thebes in the ninth century B.C. The best foil for such human jackals was clearly felt to be burial in an older tomb which would have already been plundered, and might hope to be ignored in the future. Thus the rubbish which modern excavators remove from the chambers and passages of New Kingdom tombs often produce groups of burials of the later dynasties, and our Diemacetescankh may well have come from such a find.

Djemacetescankh's cartonnage has never been opened, since to do so would require extensive cutting, and one would run the risk of damage to the decoration which is its main attraction. We have nevertheless learned as much as we can reasonably expect to know about her from the texts and pictures on her cartonnage, and from the X-rays which have been taken. Together they can be exploited to give us a fairly enlightening view of Egypt in the ninth century before Christ, a picture, I think, which is all the more interesting because it is epitomized by an individual rather than a less personal collection of artifacts. After all, what could be more personal than the person herself?

Nicholas B. Millet's fields of specialization are ancient Egyptian archaeology, history and language, and Meroitic language and history. Dr. Millet studied at the University of Chicago and Yale University, and came to the ROM in 1970 after being Assistant Professor of Egyptology at Harvard. He was Director of the Gebel Adda Project of the American Research Centre in Egypt, 1962-1966, and is crossappointed as Associate Professor in the Department of Near Eastern Studies, University of Toronto.





1931 Construction of ROM's new wing (photo faces Queen's Park)

LOOK BACK The ROM from 1912



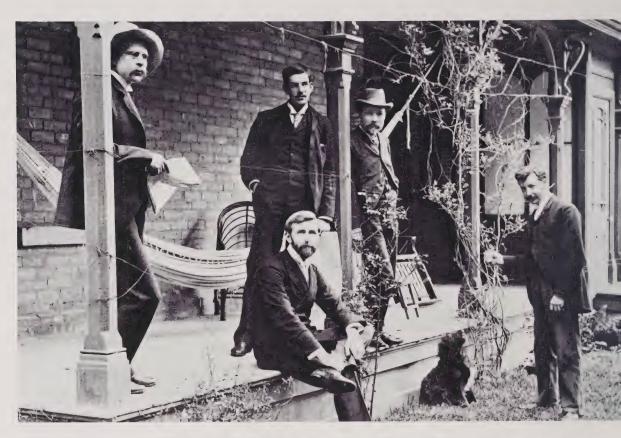


In 1833 Charles Fothergill, a member of the Legislative Assembly of Upper Canada, petitioned the Assembly to establish a "Lyceum of Natural History and Fine Arts in the City of York." A land grant was made on the Garrison Common and the project was patronized by successive Lieutenant-Governors, but no museum was built. The project was abandoned after Fothergill's death in 1840, but in 1851, an act of legislature established a provincial museum in the Normal Model School (now the home of Ryerson Institute).

During the same period, a num-



1912 The original building with main entrance on Bloor Street



1920s Early guards, conservators and carpenters





ber of small teaching collections was being assembled by the colleges which now constitute the University of Toronto. Unfortunately a large proportion of these collections was lost in fires in University College and Victoria College at the end of the century.

Once again, during the first decade of this century, the need for a major museum was recognized, and on the urging of Sir Edmund Walker and others, the Royal Ontario Museum was founded by an act of the legislature in 1912. The Ontario government had set up a committee to supervise construction of the building and had given financial support to the project since 1909. The building which now represents the west wing of the Museum was opened to the public in spring, 1913.

1933 The stairwell had to be built around the totem pole



1920s The first ROM vehicle, a Model T, with Professor Parsons driving and Dr. T. L. Walker in the rear; ROM of Mineralogy



1940s. Dr. C. T. Currelly, first director ROM of Archaeology

1932 Construction of the roof





The early ROM was really a complex of separate museums. The Royal Ontario Museums of Archaeology, Geology, Mineralogy, Palaeontology and Zoology each had separate directors, administrations and budgets. Many members of the staff were shared between Museum and teaching departments, and some of the college museums were incorporated in ROM collections.

Under the zealous and imaginative directors of the new Museums, collections grew rapidly and a reputation for scholarship was soon established internationally. By 1920, the ROM had outgrown its building. Galleries were becoming crowded and research facilities were at a premium. In 1928, the problem was complicated when the Provincial Museum at Normal Model School

closed and the collections were moved to the ROM. But plans for expansion were already under way and the new wing facing Queen's Park at the corner of Bloor Street was opened on October 12, 1933.

From the start, the Museum had strong links with the University of Toronto. The University shared operating costs with the Ontario government, turned over several of its own collections and from its faculty provided many of the senior staff. In 1947 the Museum Act was amended to make the ROM an integral part of the University of Toronto. The separate Museums were merged into one institution.

The Museum continued to grow with the help of its many friends. In 1951 Dr. Sigmund Samuel built and

Chinese collection in old building before 1933

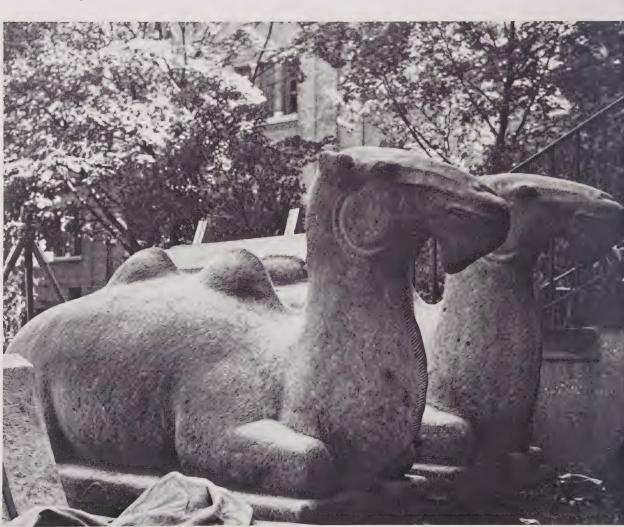
endowed a gallery (Sigmund Samuel Canadiana Building, 14 Queen's Park Crescent West) to hold a collection of Canadiana, much of which he himself presented to the Museum. In 1964 the Museum received a gift from Colonel R. S. McLaughlin, Chairman of General Motors Canada Ltd. of \$2 million to build a planetarium.

In 1968 the Museum became a separate body, apart from the University. Under terms of the Provincial Statute, the Museum and Planetarium land and buildings on Bloor Street and Queen's Park Drive became Museum property. The Canadiana Gallery and Archives Build-

ing on Queen's Park Crescent remain the property of the University but the Museum has been granted the continuing right to use space for the Canadiana Gallery.

Today there is a total of 21 departments in the fields of art and archaeology and natural sciences with a staff of over 400 and several million artifacts and specimens. Although the public galleries cover three acres, only a small proportion of the collections can be displayed at one time. As much floor space again is devoted to laboratories, study rooms, libraries, offices and workshops. Every specimen and object is recorded, numbered and

1959 Camels from Chinese tomb group await final installation in the garden



stored for quick reference. Skilled conservators are entrusted with their preservation. Meanwhile, new exhibits are continually being planned and built by three display departments and a staff of cabinetmakers.

Although the Museum is already bursting at its seams, its collections are constantly increasing. Material is obtained through gifts, exchanges with other museums or purchases. Another method is through field parties. ROM staff in many parts of the world are uncovering relics of the past or collecting new specimens in the life and earth sciences. Eventually their discoveries, too, are displayed at the ROM.

C.A.K.

1930s Chinese tomb figure being moved into new building





1943 Staff after hours-party for retirement of John Todd, head carpenter

FENGATE AND THE FENS

by Francis Pryor Curatorial Assistant Office of the Chief Archaeologist



The southern Fens, showing places mentioned in the text

During the summer of 1971 a team from the ROM began a first season of excavations at Fengate, an industrial suburb of the City of Peterborough, about 80 miles north of London. The modern setting for the dig is not good. Peterborough is a fairly typical light industrial Midlands town and as such rather unprepossessing. Today it owes its importance as a commercial centre to the east coast London-Edinburgh railway line which was constructed in the middle of the last century.

The prehistoric site at Fengate, however, was important in ancient times for a number of reasons which can be best appreciated if the geography of the area is understood. London is skirted to the north by a series of gently rolling chalk hills which gradually give way, as one travels north, to a fertile lowlying plain. About 60 miles north of London this plain becomes the Fens.

The Fens have played an important part in English history and legend. They consist of absolutely flat, lowlying fresh water marshlands that have only quite recently been drained. In the past they covered large areas of East Anglia north of Cambridge, and their complex serpentine waterways gave protection to many famous national figures including the Briton Queen Boadicea (more properly 'Boudicca') who led a sizable rebellion against the Roman army in A.D. 60/61, and Hereward the 'Wake' who in 1070 burned Peterborough to the ground. He was eventually caught by the Normans and has since become, along with Robin Hood, an almost fictional figure of Anglo-Saxon resistance.

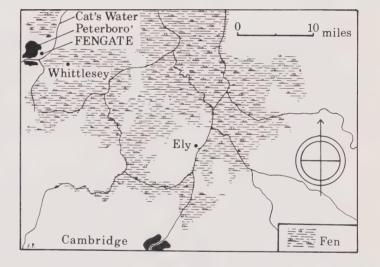
If the Fens could afford protection to the likes of Hereward, they could also provide peaceful isolation to those seeking escape from the day-to-day cares of medieval life. There were many fenland monasteries. One of the most famous abbeys was built on the then isle of Ely, and today Ely Cathedral is considered one of the finest examples of Norman and early medieval architecture in northern Europe. Peterborough Cathedral, also

once an abbey, is at least the third of a series of churches that have stood on the site. The present building was consecrated on October 4th, 1237, and its massive triple-arched west front is one of the glories of the Early English style of church architecture.

The construction of these magnificent buildings, an achievement in itself, was even more remarkable as none of the monasteries had been situated near sources of suitable building stone. The stone used to build Ely Cathedral had to be transported at least 20 miles, by cart and barge. During the 18th century huge, rough-hewn blocks of building stone were found lying on the peaty bottom of Whittlesey Mere, one of the many large, shallow fenland lakes, after it had been emptied following drainage operations. Presumably, these blocks had been jettisoned from barges that had run aground on their way to Ely and the other abbeys. Many of the blocks carried masons' or quarrymen's marks which can be matched on the stone work of the great fenland churches.

The large-scale drainage works of the 17th and 18th centuries were the first serious, concerted attempts to reclaim land originally drained by the Romans in the late first and early second centuries A.D. The Roman Fen drainage was almost certainly undertaken by a central government agency as it would have required many accurate, co-ordinated survey and levelling projects. The completion of such an involved undertaking would not have been possible without a well organized and stable social system, good communications, considerable engineering skill and the ability to maintain numerous dykes and ditches, often cut through soft peats, muds or silts. It was without doubt a most remarkable achievement and well worth the effort, because then, as now, the black fenland soils were among the richest in Britain.

We have seen that the Fens were important in Roman times and it is therefore hardly surprising that we



have found many traces of native Romano-British settlement at Fengate. As far as we know, these small farmers would have relied on cattle-raising as their main source of income and food. Last year we found the roadside ditches that bounded a Romano-British cattle droveway, and to judge by the large quantities of pottery in the filling of these shallow ditches, the local peasant farmer was quite a prosperous fellow.

However the Fengate site is not particularly famed for its Romano-British remains. It is primarily a pre-Roman, prehistoric site of great importance, well-known to British archaeologists

for at least 50 years. But why, one might reasonably ask, should prehistoric man choose to settle in the undrained Fens? There are a number of answers to that question. For a start, Fengate is not, strictly speaking, in the Fens. The site sits atop a slight rise of gravel about a hundred yards west of the marshes. It is therefore considered a Fen Margin site. It must have been wet, cold and very windy—the area is still notorious for its biting east winds, and the Fen mists that crawl over the surrounding fields are damp and unpleasant. But the advantages of a Fen Margin location considerably outweigh these small inconveniences.

General view of the excavation around Ditches 1 and 2, looking south-east



The gravel subsoil of the site drains well, and as the surface is at least 15 feet above sea level, it is most unlikely that it would have been subject to heavy seasonal flooding. From this dry and flood-free haven, ancient man could make trips into the Fens in search of peat for fuel, wildfowl, fish, eels, reeds for thatching and the like. At the same time, the land around him would have been dry enough to give him the security of domestic animals and agriculture. In short, Fen Margin dwellers could combine aspects of hunter-fisher life with the benefits of a settled village economy. It is hardly surprising, therefore, that such a site should have been

more or less continuously occupied for some 2,000 years before the coming of the Romans.

In 1910 a paper was published in the learned journal *Archaeologia* entitled 'The Discovery of Prehistoric Pits at Peterborough'. It was written by the gentleman who made the discoveries and it sparked off considerable interest in the area. Another learned paper was published in 1922 and yet another in 1945. Finally, important works that considered Fengate in detail were published in 1956, 1968, two in 1969 and one in 1970. It would appear that our site has received its fair share of attention—or has it? Many, myself included, would



Wattle-lined pit or well, probably pre-Roman Iron Age



Lyn Gardiner, ROM Photography Department, at work. Panoramic views of a site in the Fenlands require an unusual vantage point

say no, not because of the quality of past archaeological papers, but because of the far from ideal circumstances under which the original finds were made. Vast quantities of later Neolithic, Bronze and Iron Age pottery were unearthed during gravel-working, just to the south of the Museum's 1971 site. Unfortunately in those days the powers to stop such destruction did not exist, and we may count ourselves lucky to have what we do. If it had not been for the efforts of one distinguished local archaeologist who has been active in the area for the past 75 years, nothing would have survived. Nevertheless, it is galling to have lost so much after it had survived intact for three to four thousand years.

Most of these early finds were made in small pits that were probably dug for storage purposes before they became contaminated in one way or another. Then they were filled with contemporary rubbish such as meat bones, worn flint tools and broken domestic pottery. The Fengate gravel-workings revealed so many rubbish-filled pits that it is reasonable to assume that the site was a settlement and quite a large one. As far as we can tell, the settlement would have occupied, at various times, an area of about 20 acres, maybe a little more. It was bounded to the south and east by the Fens and a small stream known locally as the Cat's Water that was probably once one of the ancient courses of the River Nene. To the west of the site, the Car Dyke, a remarkable earthwork consisting of a bank and deep ditch, was constructed in Roman times as part of the Fen drainage operations. The Car Dyke may well have followed the line of an earlier, possibly defensive, earthwork, but this cannot be proved without excavation. The settlement would, therefore, appear to have been protected on three of its four sides. What, if anything, protected its northern approaches?

Ditches and pits, indeed any substantial disturbance, leave distinct, almost permanent, traces on the composition and compactness of the soil. In general, crops such as wheat or barley tend to grow faster on disturbed ground and slower over sunken stone walls, old paved roads and the like. These differences in growth

-crop-marks—may be clearly seen from the air, and the skill of the aerial photographer lies in his ability to choose the best time of year and day to photograph them. The excellent Fengate air photographs revealed the cropmarks of at least 15 parallel ditches traversing part of the northern approaches to the settlement area. At present I very tentatively regard these linear ditches as the surviving remnant of a system of defences-in-depth. In 1971 we excavated four of these linear ditches (nos. 1-4) and found no good reason to reject the defence hypothesis. The precise dating of the ditches is still uncertain, but finds from them, particularly those from Ditches 1 and 2, would indicate that the ditches may have been in use very early in the Iron Age, which at Fengate is currently placed in, just before, and after the fifth century B.C. However three radiocarbon dates currently being processed at the Queen's University, Belfast, should give us a more precise idea of when they were used and dug.

The absence of written records makes it very difficult to say what sort of attack the ditches

were built to repel. In Early Iron Age times fighting was probably organized, like other aspects of life, on tribal lines. A few warriors might have possessed horses, but chariots were not yet used and it is likely that most of the fighting was done on foot. Very probably the ditched defensive works were dug as precautions against cattle rustling rather than fullscale tribal war. There is another settlement site, on the far side of Peterborough, with a similar ditched defensive system. This site, Lynch Farm, has not been excavated, so we cannot yet be certain of the purpose of these ditches, but air photographs show them clearly to cut the only approach to the settlement not protected by a meander of the River Nene. The many-ditched defensive system, if that is what it is, would appear to be very well suited to the flat ground of the region. Indeed, one cannot help thinking that the gentlemen who designed the Maginot line could have learned a few useful lessons from the inhabitants of prehistoric Peterborough.

In 1971 we also found occupation debris and



General view of the Fengate area from one of the site's spoil heaps. Notice the extreme flatness of the surrounding countryside



Mechanical excavator preparing the surface. Notice the smooth surface left by the specially adapted digging bucket

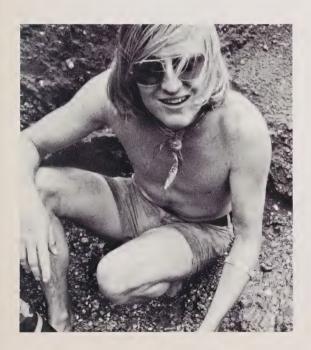
pottery that might be of the well-known Fengate style (the type was named after finds made in the area before the last war), which was an important group within the widespread later Neolithic 'Peterborough' ceramic tradition. The Fengate style of pottery can be seen to have traits in common with earlier Neolithic types and succeeding Bronze Age forms. It was in common use around 2.000 B.C. In addition to this material, we also excavated two small pits in which were sherds of Beaker pottery which can be dated to about 1,500 B.C. The Beaker people—thus named after the distinctive form of their pottery—came to Britain in two groups, the first in about 20/2100 B.C. and they comprise one of the few well-attested prehistoric movements of folk from the continental mainland to the British Isles. They ceased to be clearly distinguished from the native population after about 1400 B.C. As well as pottery, we

also found flint implements and one small arrowhead that had been used by a Beaker family and then thrown out with the other household rubbish. Apart from the other periods I have mentioned—Neolithic, Early Bronze Age, Early Iron Age, Roman—we also found evidence that the site had been the home of a later Iron Age group shortly before, or just after, the Roman conquest of A.D. 43.

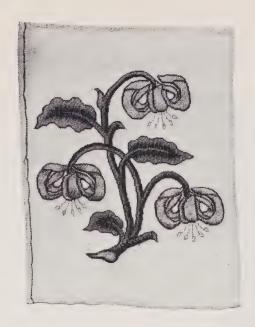
What would it have been like to have lived at Fengate in Early Iron Age times? We have seen that suitable building stone was hard to come by, and it certainly would have been beyond the means of a peasant community. Although no traces of buildings have yet been found at Fengate, thanks to the gravel-works, we know from other sites of this period that families would probably have lived in round huts. These would have been made out of a ring of stout wooden posts set firmly into the ground.

The spaces between the uprights would have been filled with a screen of woven twigs over which mud would have been smeared to keep the wind out. This technique—wattle and daub —was widely used in country districts until quite recently; there is a long wattle and daub wall, capped with a miniature thatched roof, in the village of Ashwell, about an hour's drive from the site. The Iron Age huts probably had wide eaves to keep the walls dry and the roof would have been thatched with either straw, reeds or turf. Each family would probably have stored its grain over winter in small pits or baskets, and it is likely that there would have been a considerable slaughter of livestock in the Fall. Clothes would have been made from skins or woollen cloth. In fact we found fragments of five loom-weights in Ditches 1 and 2 of the supposed defensive system. These fistsized, cylindrical baked lumps of clay which had been perforated before firing, would have hung below the loom, tied to the warps of the cloth being woven. Pottery was probably made by the women of the community and we have found slight evidence that salt was extracted from silt or brine somewhere in the village. Water lay just a few feet below the surface and last year we had the good fortune to find a small wattle-lined well or water hole. The twigs used to form the basket-like lining of this pit had been woven around posts that had been sharpened and driven into the gravel. A very similar feature has been found at a nearby site in Iron Age contexts. At both sites the woodwork survived because it had lain permanently below the water-table.

In future seasons I plan to excavate the remaining ditches of the defensive system, to prove or reject my current theory. Having done that, I plan to excavate within what is left of the Early Iron Age settlement area, and there I hope to find the remains of hut foundations and evidence that can link the linear ditches to some, preferably well-dated, phase in the settlement's development.



Francis Pryor was born in London, England in 1945. He was educated at Trinity College, Cambridge University, where he received an M.A. in Archaeology and Anthropology. He has worked on many British archaeological sites since 1962, and in 1970 was Assistant Director at the North Elmham Anglo-Saxon site, a dig which the ROM helped finance. Mr. Pryor is particularly interested in the Early Iron Age in Eastern England and, when not digging or writing up the Fengate site, is cataloguing the ROM's extensive prehistoric British metalwork collections.



Recent Publications

EARLY CANADIAN POTTERY by Donald Webster McClelland and Stewart; 256 pages illustrated, 16 colour plates; \$12.95

Is there, these days, a house or apartment without its piece of early Canadian pottery? It seems not. Ranged along window sills, grouped in corners or standing single in an honoured spot, they can warm an entire room with their gentle earthiness. It's a recent phenomenon, this passion for pots. Not surprising then that little has been written, for the collector at any rate, on their background. And, therefore, not surprising that most collectors are not fully aware of what they possess. *Early Canadian Pottery* now has much to tell them.

The author is ROM's Curator of Canadiana. He too is an incorrigible victim of the passion but he's also a historian and archaeologist in the subject. His book tells of the history of Canadian pottery, emphasizing how utilitarian it was. Potters made butter pots, beer bottles and molasses jugs but most all tableware was imported. He describes the manufacturing techniques of both the individual potter and the factory, some of which, Brantford for instance,

were quite substantial. The final chapter deals with the archaeology of pottery sites, from whence came much of his knowledge.

Collectors, save perhaps the already erudite, will find the profuse illustrations particularly helpful in identification.

A.M.D.

ENGLISH EMBROIDERY

by K. B. Brett

Royal Ontario Museum, 96 pages plus stitch identification and samples by Charlotte Zuppinger; hard cover, 70 illustrations, 8 colour plates; \$8.95

The English domestic embroideries in the collections of the ROM range from the Tudor period to the late 18th century. Most of the examples in this book were embroidered by the ladies of the house, and only a few show the professional's expertise. Needlework was an essential accomplishment, not only for embellishment of household furnishings, clothing and accessories, but as identification of linens and the like. English Embroidery documents more than 80 examples, ranging from a rare black work pillow of Tudor times to 18th century whitework and quilting. There are samplers on which the very young girl painstakingly recorded examples of the various stitches and, later, learned her alphabet and numerals. Pictures, caskets and looking glasses display the fine stitches so laboriously learned. Crewelwork bedcurtains and coverlets brightened drafty bedrooms; embroideries on canvas covered chairs, screens and floors; silk embroideries on court robes, waistcoats and aprons delighted the fashionable world. Flowers and fruit, buds and blossoms were among the favourite motifs, and English Embroidery will delight both the needlewoman and the lover of fine handwork.

TWO NEO-ASSYRIAN STELAE FROM IRAN; Art and Archaeology Occasional Paper 23; Louis D. Levine, Assistant Curator, West Asian Department; 86 pages; illustrated; \$3.00

A REVIEW OF THE NORTH HAWK MOTH GENUS LAPARA (LEPIDOPTERA: SPHINGIDAE); Life Sciences Contribution 79; J. C. E. Riotte, Research Associate, Entomology and Invertebrate Zoology; 40 pages, illustrated; \$2.00

All publications listed above are available from the ROM or at the ROM Book and Gift Shop.

The Growing Collections

English ecclesiastical embroidery of the 13th century known as Opus Anglicanum is considered the finest work of this kind that has ever been produced. It is unlikely that the ROM will ever acquire an example of this best period, but we have recently been most fortunate in obtaining a pair of English orphreys for a chasuble that date from about 1425 that are embroidered in silk and couched gold. The cross orphrey for the back of the chasuble is shown here, and shows St. Faith with a gridiron and St. Thomas with a book and a spear, below the Crucifixion. The front orphrey also shows saints popular in England: St. Catherine with a wheel, St. Peter with keys and a book, and St. Margaret spearing a dragon.

A late 15th century German, probably Rhenish, green glass vessel called a Nuppenbecher or Krautstrunk has been recently acquired by the European Department. Glasses of this type had a two-fold function. In paintings by North European artists such as Dirk Bouts we see these small vessels displayed as drinking glasses; their other use was as a container for relics of saints, the container being sealed with wax and placed in an altar.



In portraits of the 18th century, gentlemen are sometimes shown wearing suits with fur lining. Few of these rich garments have survived, but the Textile Department has been fortunate in obtaining a handsome English one of about 1775. It is made of coral red French silk, lined and trimmed with ermine. The purchase was made possible by a generous gift from the Member's Committee of the Museum.

Two species new to the Mineralogy collection have been acquired recently: carletonite from Mont St. Hilaire, Quebec; and godlevskite (in a polished section) from the Timiskaming District, Ontario, which was donated by Dr. A. Naldrett.

A large sperrylite crystal (1 x 1 x 2 cms.) from the Vermilion Mine near Sudbury, was purchased. This specimen is believed to be one of the finest from this locality in any collection in the world. Sperrylite is a platinum mineral; crystals larger than ½ cm. are very scarce.

Several other fine specimens were purchased from the Elmer Rowley collection. Of special note are a superb Bolivian vivianite crystal; a single sulphur crystal from Cafabri, Italy; a magnificent group of azurite crystals from Tsumeb, South West Africa; and some fine specimens from New York State (tourmaline, zircon,

scapolite and magnetite, for example).

A selection of these specimens is currently on exhibition in Case T30 in the Mineral Gallery.

A glass Kovsh (left) and a bowl (right) are part of a collection of late 19th and early 20th century Russian glass given by Mr. Robert A. Laidlaw. The deeply cut silver-mounted Kovsh dates from the early 20th century; the silver rim of the bowl (right) bears late 19th century marks of the Fabergé workshop.





The Far Eastern Department's holdings of Chinese lacquer have long been both representative and extensive, largely due to the generosity of such benefactors as Major James E. Hahn. This has not been so with Japanese lacquer which has an equally distinguished history of development. We have no or few examples of early and classical types from this sphere of Japanese art, though it has importance both for its indications of interaction with continental China and in its later influence upon European decorative styles.

Recent acquisition of a "Negoro" type ewer fills one gap in the collection. The vessel demonstrates a technique long associated with lacquer ware made by monks of the Negoro temple on the Kii Peninsula. Its body is lathe-turned with details refined by carving. The surface was first covered with black lacquer and then with red partially wiped off to reveal the undercoat, thereby giving an accidental effect to the warmth and depth of its colour. Ordinary food containers were made in this way by the monks between 1288, when the temple was founded, and 1587, when Toyotomi Hideyoshi destroyed it. It is now thought that no examples remain of the temple's production, though a few dated lacquers from the 13th through 16th century show the general popularity of the technique. During the 16th century particularly Chinese influence upon shape and decorative elements became evident. Our ewer reveals Ming Dynasty inspiration in the curves of its handle, foliate finials, bat-shaped feet, and slender spout. Its Japanese creator followed native tastes in producing the more natural lotus-form lid and in honestly expressing wood-working technique through turned ridges for the body decoration.



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